Appl. no. 09/527,931

Appl. no. 09/527,931

Appl. no. 09/527,931

Modified Form PTO/SB/08A

INFORMATION DISCLOSURE	Α
77	F
STATEMENT BY APPLICANT	F

(use as many sheets as necessary)

No. of Refs.: 192

Suggitute for form 1449A/PTO

Ca	mplete If Known	
Application Number	09/527,931	
Filing Date	March 17, 2000	
First Named Inventor	Gaetan L. Mathieu	
Group Art Unit	3726	
Examiner Name	Rick K. Chang	
Attorney Docket No.	P114-US	

Everniner	Cito		ISHED PATENT DOCUMI Name of Patentee or	Publ./Issue	Related#	Сору
Examiner Initials*	Cite No. ¹	U.S. Patent Document Number Kind Coo		Date	Keiateu	Enclosed
militars	1.	7126358	Mok, et al.	10/2006		No***
	2.	7102085	Ohta, et al.	9/2006		No***
	3.	6917525	Mok, et al.	7/2005		No"
	4.	6894888	Takeuchi, et al.	5/2005	_	No***
	5.	6815961	Estes, et al.	10/1998		No
	6.	6799976	Mok, et al.	10/2004		No***
	7.	6729019	Grube, et al.	5/2004		No***
	8.	6706975	Sumi, et al.	3/2004		No***
 -	9.	6676784	Setzer, et al.	1/2004		No***
	10.	6499216	Fjelstad	12/2002		No***
	11.	6420884	Khoury, et al.	7/2002		No***
<u></u>	12.	6341417	Gupta, et al.	1/2002		No***
	13.	6305230	Kasukabe, et al.	10/2001		No
	14.	6275051	Bachelder, et al.	8/2001		No***
	15.	6272020	Tosaki, et al.	8/2001		No***
·	16.	6255602	Evans, et al.	7/2001		No
	17.	6241838	Sakamoto, et al.	6/2001		No***
	18.	6232791	Jistumori, et al.	5/2001		No***
	19.	6193910	Ikai, et al.	2/2001	1	No"
	20.	6140830	Ott	10/2000		No"
	21.	6011405	Sikora	1/2000		No"
	22.	6078186	Hembree et al.	6/2000		No
	23.	6072190	Watanabe, et al.	6/2000		No
	24.	6028305	Minne, et al.	2/2000		No***
	25.	6021050	Ehman, et al.	2/2000		No
	26.	6000130	Chang, et al.	12/1999		No T
	27.	5989994	Khoury, et al.	11/1999		No
	28.	5976286	Natarajan	11/1999		No
	29.	5974662	Eldridge et al.	11/1999	#	No"
	30.	5952840	Farnworth, et al.	9/1999		No"
	31.	5937515	Johnson	8/1999		No
	32.	5917707	Khandros, et al.	61999	#	No***
	33.	5914533	Frech, et al.	6/1999		No***
	34.	5914218	Smith, et al.	6/1999		No***
	35.	5879568	Urasaki, et al.	3/1999		No

Appl. no. 09/527,931 IDS dated September 3, 2009

	36.	5847571	Liu, et al.	12/1998		No***
	37.	5825192	Hagihara	10/1998		No
	38.	5821763	Beaman, et al.	10/1998		No***
	39.	5806181	Khandros, et al.	9/1998	#	No"
	40.	5801441	DiStefano, et al.	9/1998		No
	41.	5789701	Pedder	7/1998		No***
	42.	5774340	Chang, et al.	6/1998		No***
	43.	5672977	Yamada	9/1997	†	No***
	44.	5654647	Uhling, et al.	8/1997		No***
	45.	5649385	Acevedo	7/1997		No"
	46.	5642056	Nakajima, et al.	6/1997		No"
	47.	5639385	McCormick	6/1997		No***
	48.	5635846	Beaman, et al.	6/1997		No***
	49.	5613861	Smith, et al.	3/1997		No***
	50.	5576630	Fujita	11/1996		No"
-	51.	5563509	Small	10/1996		No"
	52.	5546012	Perry, et al.	8/1996		No"
	53.	5541525	Wood, et al.	7/1996		No***
	54.	5534784	Lum, et al.	7/1996		No***
	55.	5530371	Perry, et al.	6/1996		No"
	56.	5521518	Higgins	5/1996		No***
	57.	5517280	Quate	5/1996		No***
	58.	5517126	Yamaguchi	5/1996		No"
	59.	5513430	Yanof, et al.	5/1996		No
	60.	5491426	Small	2/1996		No"
-	61.	5480503	Casey, et al.	1/1996		No***
	62.	5476818	Yanof, et al.	12/1995		No"
	63.	5476211	Khandros	12/1995	#	No
	64.	5450290	Boyko, et al.	9/1995		No
	65.	5422574	Kister	6/1995		No
	66.	5416429	McQuade, et al.	5/1995		No**
	67.	5371654	Beaman, et al.	12/1994		No
	68.	5355079	Evans, et al.	10/1994		No***
	69.	5323107	D'Souza	6/1994		No***
	70.	5272913	Toda, et al.	12/1993		No***
	71.	5264696	Toda	11/1993		No
	72.	5260926	Kuroda, et al.	11/1993		No
	73.	5228862	Baumberger, et al.	7/1993		No"
	74.	5225771	Leedy	7/1993		No**
	75.	5221415	Albrecht, et al.	6/1993		No
	76.	5180977	Huff	1/1993		No***
	77.	5173055	Grabbe	12/1992		No
	78.	5166520	Prater, et al.	11/1992		No"
	79.	5157325	Murphy	10/1992		No***
	80.	5152695	Grabbe, et al.	10/1992		No
_	81.	5120572	Kumar	6/1992		No

Page 4 of 8

Appl. no. 09/527,931 IDS dated September 3, 2009

	82.	5103557	Leedy	4/1992	No
	83.	5095616	Veenendaal	3/1992	No
	84.	5070297	Kwon, et al.	12/1991	No
	85.	5066358	Quate, et al.	11/1991	No
_	86.	5059898	Barsotti, et al.	10/1991	No
	87.	5055778	Okubo, et al.	10/1991	No
	88.	5049084	Kondo, et al.	1/1992	No***
	89.	4998885	Bakke	9/1991	No
	90.	4975638	Evans, et al.	12/1990	No
	91.	4968589	Perry	11/1990	No"
	92.	4965865	Trenary	10/1990	No
	93.	4961052	Tada, et al.	10/1990	No***
	94.	4943719	Akamine, et al.	7/1990	No***
	95.	4906920	Huff, et al.	3/1990	No***
	96.	4899099	Mendenhall, et al.	2/1990	No***
	97.	4891585	Janko, et al.	1/1990	No
	98.	4866507	Jacobs, et al.	9/1989	No
	99.	4837622	Whann, et al.	6/1989	No"
	100.	4833402	Boegh-Petersen	5/1898	No
	101.	4793814	Zifak, et al.	12/1988	No"
	102.	4784972	Hatada	11/1988	No***
	103.	4757256	Whann, et al.	7/1988	No***
	104.	4734046	McAllister	3/1988	No
	105.	4969826	Grabbe	11/1990	No***
	106.	4665360	Phillips	5/1987	No***
	107.	4650545	Laasko, et al.	3/1987	No
	108.	4623839	Garretson, et al.	11/1986	No***
	109.	4622514	Lewis	11/1986	No***
	110.	4599559	Evans	7/1986	No***
	111.	4567433	Ohkubo, et al.	1/1986	No***
	112.	4536470	Amendola, et al.	8/1985	No***
	113.	4523133	Messenger	6/1985	No
	114.	4506215	Coughlin	3/1985	No
	115.	4423376	Byrnes, et al.	12/1983	No***
	116.	4312117	Robillard, et al.	1/1982	No
	117.	4177554	Deveres, et al.	11/1979	No
	118.	4161692	Tarzwell	7/1979	No
	119.	4038599	Bove, et al.	7/1977	No***
-	120.	3963986	Morton, et al.	6/1976	No
	121.	3952410	Garretson, et al.	4/1976	No
	122.	3866119	Ardezzone, et al.	2/1975	No
	123.	3806801	Bove	4/1974	No
	124.	3795037	Luttmer	3/1974	No "
	125.	3702439	McGahey, et al.	11/1972	No
	126.	3623127	Glenn	11/1971	No"

Examiner	Cite	Fore	ign Patent Document	Name of Patentee or Applicant	Publ. Date	_T 6	Сору
Initials*	No.1	Office ³	Number ⁴ Kind Code ⁵				Enclosed
	127.	DE	19952943	Kund	7/3/2003		Yes
	128.	EP	0275634	Smolley	7/27/1988		Yes
_	129.	EP	0295914	Karnezos	12/21/1988	1	Yes
	130.	EP	0460822	Frakeny et al.	12/11/1991	1	Yes
	131.	EP	0701135	Kubena	3/13/1996	1	Yes
	132.	EP	0729652	Khandros	10/16/2002	7	Yes
	133.	EP	0845677	Budnaitis	11/5/1997	7	Yes
	134.	EP	1014096	Muramatsu	6/28/2000	\\	Yes
	135.	EP	1077381	Maruyama	2/21/2001	1	Yes
	136.	EP	1098200	Kund	5/9/2001		Yes
	137.	FR	2680284	Christian	2/12/1993		Yes
	138.	JP	03-061339	Masahiro	3/18/1991	V	Yes
	139.	JP	04-207047	Takao	7/29/1992	1	Yes
	140.	JP	04-297876	Hasegawa	10/21/1992	1	Yes
	141.	JP	04-297879	Hasegawa	10/21/1992	V	Yes
	142.	JP	04-333250	Komatsuzaki	11/20/1992	1	Yes
	143.	JP	05-015431	Kazunari	2/26/1993	1	Yes
	144.	JP	05-018741	Kawase	1/26/1993	1	Yes
	145.	JP	05-102254	Watanabe	4/23/1993	1	Yes
	146.	JP	05-144897	Abe	6/11/1993	1	Yes
	147.	JP	05-164785	Akaogi	6/29/1993	1	Yes
	148.	JP	05-211218	Feigenbaum	8/20/1993	1	Yes
	149.	JP	05-264591	Abe	10/12/1993	1	Yes
	150.	JP	06-077295	Sakagami	3/18/1994	1	Yes
	151.	JP	06-267408	Todokoro	9/22/1994	$\sqrt{}$	Yes
	152.	JP	07-007052	Nose	1/10/1995	1	Yes
	153.	JP	07-063999	Yagi	3/10/1995	1	Yes
	154.	JP	07-135240	Yamasaka	5/23/1995	1	Yes
	155.	JP	07-021968	Watanabe	1/24/1995	1	Yes
	156.	JP	07-288271	Nakano	10/31/1995		Yes
	157.	JP	08-083824	Yamada	3/16/1996	1	Yes
	158.	JP	08-211101	Pasiecznik Jr.	8/20/1996	V	Yes
	159.	JP	09-004278	Yano	1/7/1997	V	Yes
	160.	JP	09-138242	Anzai	5/27/1997	1	Yes
	161.	JP	10-163278	Kono	6/19/1998	1	Yes
	162.	JP	10-260233	Hasegawa	9/29/1998	V	Yes
	163.	JP	11-260871	Yamasaka	9/24/1999	1	Yes
	164.	JP	2000-124397	Khandros	4/28/2000	V	Yes
	165.	JP	2002-22767	Khoury	1/23/2002	Ì	Yes
	166.	JP	02-226996	Hiroshi	9/10/1990	Ì	Yes
	167.	JP	3292406	Mitsumasa	3/29/2002	Ì	Yes

Page 6 of 8

Appl. no. 09/527,931 IDS dated September 3, 2009

168.	JP	57-113243	Hasegawa	7/14/1982	$\sqrt{\ }$	Yes
169.	JP	57-193051	Tatsuo	11/27/1982	$\sqrt{}$	Yes
170.	KR	10-0282737		11/30/2000		Yes
171.	WO	98/52218	Kasukabe	11/19/1998		Yes

		OTHER PRIOR ART – NONPATENT LITERATURE DOCUMENTS		
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ⁶	Copy Enclosed
	172.	"Membrane Probe Technology for MCM Known-Good-Die", article, HP Japan, 1994 (MJC1975640-47)		Yes
	173.	Matta, "Wafer Level Testing With a Membrane Probe", article, IEEE, 1989 (MJC1975612-19)		Yes
	174.	R. Miracky et al., "Technologies for Rapid Prototyping of Multi-Chip Modules", Computer Design: VLSI in Computers and Processors-Proceedings, 1991, pages 588-592.		Yes
	175.	Kai Zoschke et al., "Stackable Thin Film Multi Layer Substrates with Integrated Passive Components", Electronic Components and Technology Conference-Proceedings, 2006, pages 806-813.		Yes
	176.	R. R. Tummala, et al., "High-Performance Glass-Ceramic/Copper Multilayer Substrate with Tine-Film Redistribution", IBM Journal of Research and Development-Proceedings, vol. 36 no. 5, September 1992, pages 889-904.		Yes
	177.	Nancy E. Preckshot et al., "Design Methodology of a 1.2 µm Double- Level-Metal CMOS Technology", IEEE Transactions on Electron Devices-Proceedings, vol. 31 no. 2, February 1984, pages 215-225.		Yes
	178.	Grace Chan et al., "C4 Probe Card Space Transformer Technology Overview", Intel Southwest Test Workshop-Proceedings, June 12, 2000, pages 1-24.		Yes
	179.	A. Fach et al., "Multilayer Film Substrates with 30 μm Vias for MCM Applications", International Conference on Multichip Modules and High Density Packaging-Proceedings, 1998, pages 337-341.		Yes
	180.	T. Tada et al., "A Fine Pitch Probe Technology for VLSI Wafer Testing", International Test Conference (ITC)-Proceedings-The Changing Philosophy of Test, 1990, pages 900-906.		Yes
	181.	Daniel T. Hamling, "A 3 GHz, 144 Point Probe Fixture for Automatic IC Wafer Testing", International Test Conference (ITC)-Proceedings, 1992, pages 940-947.		Yes
,	182.	Nicholas Spork, "A New Probe Card Technology Using Compliant Microsprings", International Test Conference (ITC)-Proceedings, 1997, pages 527-532.		Yes
	183.	Bruce C. Kim, et al., "A High Throughput Test Methodology for MCM Substrates", International Test Conference (ITC)-Proceedings, 1998, pages 234-240.		Yes
	184.	David H. Carey, "Trends in Low-Cost, High-Performance Substrate Technology", Microelectronics & Computer Technology Corp-Proceedings, April 1993, pages 19-27.		Yes
	185.	Teradyne, Polaris 384 OHP User Guide, Rev. 2 (MJC1975620-636) May 2, 1996		Yes

Appl. no. 09/527,931 IDS dated September 3, 2009

	_(OTHER PRIOR ART – NONPATENT LITERATURE DOCUMENTS		
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ⁶	Copy Enclosed
	186.	C. Narayan et al., "Thin Film Transfer for Low Cost MCM-D Fabrication", Proceedings-SPIE, volume 2256, International Conference and Exhibition-Multichip Modules, 1994, pages 105-114.		Yes
	187.	A.J. Piloto et al., "Integrated Passive Components: A Brief Overview of LTCC Surface Mount and Integral Options", proceedings, September 1, 1999, pages 1-7.		Yes
	188.	Karl F. Zimmerman, "SiProbe-A New Technology for Wafer Probing", proceedings, 1995, International Test Conference, pages 106-112 (MJC1975652-58).		Yes
	189.	United States International Trade Commission, In the Matter of Certain Probe Card Assemblies, Components Thereof and Certain Tested DRAM and NAND Flash Memory Devices and Products Containing Same, Inv. No. 337-TA-621, Respondent Micronics Japan Co., LTD's First Supplemental Response to Complainant FormFactor, Inc's First Set of Interrogatories (Nos. 25-29), Exhibit 5, March 14, 2008.		Yes
	190.	United States International Trade Commission, In the Matter of Certain Probe Card Assemblies, Components Thereof and Certain Tested DRAM and NAND Flash Memory Devices and Products Containing Same, Investigation No. 337-TA-621, Supplemental Response of Phicom Corporation to Complainant FormFactor, Inc.'s First Set of Interrogatories (Nos. 26-30), Exhibit 29, March 14, 2008		Yes
<u></u>	191.	"Development of Manufacturing Process Membrane Probe Card", Korean Institute of Machinery and Materials, May 1992		Yes
	192.	C. Barsotti et al., "Very High Density Probing", 1988		Yes

Examiner	Mid. Chanal	Date	44/04/0000
Signature	/Rick Chang/	Considered	11/21/2009

^{*} EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

^{**} Reference cited in parent application US Serial Nos. <u>09/527.931.</u> (See 1.98(d).)

^{***} Pre-OG Notice By Deputy Commissioner Stephen G. Kunin dated July 11, 2003 waiving the requirement to file copies of US patent publications in applications filed after June 30, 2003.

[&]amp; Notice dated October 19, 2004 by Deputy Commissioner for Patent Examination Policy waiving requirement to file copies of pending US patent applications if the applications are stored in the USPTO's IFW system.

[#] Commonly owned US patent or application whose subject matter may be related to the subject matter of the instance patent application.